REMARKS

This is in response to the Office Action that was mailed on December 31, 2002. The specification is amended in accordance with the Examiner's suggestion. No new matter has been introduced. Claims 1-4 are in the case.

Claims 1-4 are rejected under 35 U.S.C. §102(b) as being anticipated by Nitto. Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Japanese IND KK reference (hereinafter "the Matsushita reference") in view of any one of Vogdes et al. or Davis et al. or Nitto. Claims 1-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nitto in view of either Vogdes et al. or Davis et al. All of these rejections are respectfully traversed.

NITTO

The Nitto reference discloses the bonding of tubular bodies made of a fluorine-containing resin. Nitto teaches that in bonding, "***fluorine-containing resin powder (5) having thermal fusing property*** is applied on the outer peripheral surface of the end portion of said small-diameter tubular bodies (1)." See page 5, lines 19-12 of the translation provided by the PTO, emphasis supplied. In contrast, the method of the present invention does not use any fusing material. This is clear from the expression "to join them at the joining

faces" recited in independent claim 1, which means that the joining faces are directly in contact with one another and that no material is present between the joining faces.

Moreover, the Nitto reference bonds tubular bodies that are already sintered. This is clear from the teachings of "a thermal shrinkage rate of 220%" and "a thermal shrinkage rate of 160%". See the PTO translation, page 6, lines 6 and 4 from the bottom. In contrast, in the present invention, the unsintered premolded parts are joined ***in the sintering step,*** as can readily be understood from the procedural description of claim 1 herein.

Accordingly, the presently claimed method is neither taught nor suggested by the Nitto reference, alone or in view of Vogdes et al. or Davis et al.

MATSUSHITA

(IND refers to Industry and KK is analogous to Inc.)

The method of the Matsushita reference is concerned with the manufacture of mechanical components made from resin, and the examples of the resin are listed in Table 3 on page 5 of the translation provided by the PTO. All of the resins are melt injection moldable resins. Such resins are very different from the modified PTFE used in the present invention, inasmuch as for instance the modified PTFE cannot be injection molded.

Furthermore, the Matsushita method uses a mold, which can be seen from the fact that the first paragraph on page 3 of the PTO translation refers to "a primary cavity" and "a secondary cavity". In contrast, the method of the present invention used premolded parts made of modified PTFE as starting materials, and sinters the part using ***no mold***. Thus, even though the secondary references disclose fluorinate copolymers, the Matsushita reference would not have provided any motivation to join the parts of modified PTFE (which cannot be injection molded) without using a mold.

Accordingly, the present invention is not obvious from the proposed combination of the Matsushita reference with the secondary references of record (Vogdes et al., Davis et al., Nitto).

Conclusion

It is believed that a full and complete response has been made to the Office Action. Accordingly, the Examiner is respectfully requested to pass this application to Issue.

Attached hereto is a marked up version showing the changes made to the application by this Amendment.

In the event there are any problems remaining in this application, the Examiner is invited to contact Mr. Richard J. Gallagher, Registration No. 28,781, at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 CFR §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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Encl.: Marked up text showing changes

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IN THE SPECIFICATION:

The paragraph bridging pages 8-9 of the specification has been amended as follows:

> The upper limit of a sintering temperature is not limited. However, too high temperature causes the thermal decomposition of modified PTFE **[**PRFE**]**. Thus, a sintering temperature is less than the thermal decomposition temperature of modified PTFE. Heating and cooling rates can be suitably adjusted by conventional methods.